

In compliance with 37 CFR 1.121, applicant herein submits a clean version of the entire amended Specification, including claims, identified by the title "Clean Version With Changes Made." Also enclosed is a marked-up version of the entire amended Specification, including claims, distinguishable by the title "Version With Markings To Show Changes Made." In the marked-up version, deletions are indicated by ~~strike~~throughs, and additions are underlined and in red.

It is submitted that the revised documents contain no new matter, and fall completely within the scope of the material set out in the originally filed documents.

RESPONSE TO THE DETAILED ACTION

This response is being filed within three months after termination of the shortened statutory period set for responding, and a Petition and fee are enclosed for a three-month extension.

By canceling claims 1-18 that constitute the basis of the objections and citations in the Office Action, applicant submits that the entire subject matter of the Office Action is now moot.

After entry of the above-requested new claims, claims 19-99 will be in the application. The new claims contain 11 independent claims and 69 dependent claims.

A fee for 60 excess claims over twenty is enclosed. The current claim fee was calculated by subtracting from the total due for the claims in this Amendment, the amount already paid upon filing the original Continuation in Part patent application 27 October 2000.

\$540.00	80 total claims – 20 = 60 @ \$9 each (small entity)
— \$468.00	Fees originally paid for 52 excess claims
<hr/>	72 total claims – 20 = 52 @ \$9 each (small entity)
\$ 72.00	Sub-total

\$336.00

11 independent claims - 3 = 8 @ \$42 each (small entity)

\$408.00

TOTAL Excess Claim Fees

A copy of the previously submitted Fee Transmittal Form with excess claims calculation is enclosed for reference.

PETITION FOR APPROVAL OF PROPOSED DRAWING AMENDMENT

Applicant herewith respectfully petitions for approval to amend the informal drawings. A "Request for Approval of Proposed Drawing Amendment" form is attached, along with 20 sheets of drawings with the proposed amendments marked in red. Applicant proposes the following changes:

1) Modification of the shape of the box of elements labeled "host device" to diagrammatically depict a representation of a "battery bay" in FIGs. 12, 13, 14A, 14B, 14C, 14D, 14E, 14I, 15, 16, 17, 18A, 18B, 19A, 19B, 19C, and 19D. The proposed appropriate reference numbers are also shown, and these references have been temporarily incorporated into the Specification, pending the Examiner's approval of this proposed amendment.

For example, relating to FIG. 12 (page 83, lines 1-3), the Specification recites: "Connector 314 is assumed here to be built into a battery bay into which a user inserts a removable battery 310. Upon insertion, battery connector 312 mates electrically to host's connector 314." This proposed amendment adds no new matter, and is completely within the scope of the material set out in the documents.

2) In FIG. 13, element 389 previously labeled "A/D Converter" has been properly re-labeled "Power Source." This proposed new label has been temporarily incorporated into the Specification, pending the Examiner's approval of this proposed amendment. This proposed amendment corrects a minor oversight. This proposed amendment adds no new matter, and is

completely within the scope of the material set out in the documents.

3) In FIG. 14B, the “Modulator/Demodulator” at the Adapter previously was numbered 463, which conflicted with elements in other figures. Applicant proposes that the numbering be changed to 463C to correct this minor clerical error. This proposed new reference number has been temporarily incorporated into the Specification, pending the Examiner’s approval of this proposed amendment. This proposed amendment corrects a minor oversight, and adds no new matter, being completely within the scope of the material set out in the documents.

4) In FIG. 14B, applicant proposes that a box labeled “Comm. Hardware/Software,” as reference number 405C, be included in the adapter element. The Specification (page 79, lines 12-17) recites: “Whether to incorporate a supplemental temperature-sensing capability, or used independently as a means of redirecting existing data, or power signals (or both), such connector interfaces as those indicated on FIGs. 1-19D create new data and/or power paths which enhance the functionality of at least one of the connected devices. Often, such enhanced operations can usually be accomplished without intrusive modifications to existing hardware (and software, if present).” The proposed new reference number has been temporarily incorporated into the Specification, pending the Examiner’s approval of this proposed amendment. This proposed amendment corrects a minor oversight, and adds no new matter, being completely within the scope of the material set out in the documents.

5) In FIG. 14C, the “Wireless I/O Port” at the Adapter previously was numbered 497, which conflicted with the “Power Supply” element in this figure. Applicant proposes that the numbering be changed to 467A to correct this minor clerical error.

Further, the “Wireless I/O Port” at the Host Device previously was numbered 475, which conflicted with elements in other figures. Applicant proposes that the numbering be changed to 475E to correct this minor oversight.

These proposed new reference numbers have been temporarily incorporated into the Specification, pending the Examiner’s approval of this proposed amendment. This proposed

amendment adds no new matter, being completely within the scope of the material set out in the documents.

6) In FIG. 14C, the "Modulator/Demodulator" at the Adapter previously was numbered 463, which conflicted with elements in other figures. Applicant proposes that the numbering be changed to 463E to correct this minor clerical error. This proposed new reference number has been temporarily incorporated into the Specification, pending the Examiner's approval of this proposed amendment. This proposed amendment corrects a minor oversight, and adds no new matter, being completely within the scope of the material set out in the documents.

7) In FIG. 14D, the "Wireless I/O Port" at the Host Device previously was numbered 475, which conflicted with elements in other figures. Applicant proposes that the numbering be changed to 475D to correct this minor clerical error. This proposed new reference number has been temporarily incorporated into the Specification, pending the Examiner's approval of this proposed amendment. This proposed amendment corrects a minor oversight, and adds no new matter, being completely within the scope of the material set out in the documents.

8) In FIG. 14E, the "Wireless I/O Port" at the Host Device previously was numbered 475, which conflicted with elements in other figures. Applicant proposes that the numbering be changed to 475C to correct this minor clerical error. This proposed new reference number has been temporarily incorporated into the Specification, pending the Examiner's approval of this proposed amendment. This proposed amendment corrects a minor clerical error, and adds no new matter, being completely within the scope of the material set out in the documents.

9) In FIG. 14E, the "Processor" at the Host Device 417D previously was numbered 463, which conflicted with elements in other figures. Applicant proposes that the numbering be changed to 423J to correct this discrepancy. This proposed new reference number has been temporarily incorporated into the Specification, pending the Examiner's approval of this proposed amendment. This proposed amendment corrects a minor discrepancy, and adds no new matter,

being completely within the scope of the material set out in the documents.

10) In FIG. 14E, applicant proposes a slight repositioning of the powerline modulation symbol along conductor 437A, which had previously been slightly out of alignment and, also, that one of the indicator arrows in conductor set 480 be lengthened to bring it to a uniform length with the others. This proposed amendment corrects minor oversights, and adds no new matter, being completely within the scope of the material set out in the documents.

11) In FIG. 14E, the drawn box with reference number 416 at the Battery Source 415B had no label. Applicant proposes that the text "Device Emulator" be incorporated into this box to correct this minor discrepancy. This proposed new label is consistent with the same element 416 already labeled as a "Device Emulator" in FIG. 14I. Further, the Specification (page 120, lines 5-7) recites: "To activate a peripheral connector so that data can be transferred necessitates a 'device emulator' within the battery. A host system must recognize the device emulator as a valid floppy drive." This proposed amendment corrects a minor inconsistency, and adds no new matter, being completely within the scope of the material set out in the documents.

12) In FIG. 14I, the label "Power Supply" 411 at the Adapter device 420 previously was labeled "Power Converter." Applicant proposes that the label be changed to be consistent with the numerous usages of Power Supply throughout the drawings. This proposed new label has been temporarily incorporated into the Specification, pending the Examiner's approval of this proposed amendment. This proposed amendment corrects a minor inconsistency, and adds no new matter, being completely within the scope of the material set out in the documents.

13) In FIG. 14I, the "Wireless I/O Port" at the Adapter 420, and also the one at the Host Device 417E, were previously both numbered 475. Applicant proposes that the numbering be changed to 475B and 475A, respectively, to correct this discrepancy. This proposed new reference numbers have been temporarily incorporated into the Specification, pending the Examiner's approval of this proposed amendment. This proposed amendment corrects a minor clerical error, and adds no

new matter, being completely within the scope of the material set out in the documents.

14) In FIG. 14I, the "Processor" at the Host Device 417E previously was numbered 463, which conflicted with elements in other figures. Applicant proposes that the numbering be changed to 423E to correct this conflict. This proposed new reference number has been temporarily incorporated into the Specification, pending the Examiner's approval of this proposed amendment. This proposed amendment corrects a minor oversight, and adds no new matter, being completely within the scope of the material set out in the documents.

15) In FIG. 15, the incorporation of a "Switch" 585 and a "Load" 587 element is proposed at the Third Device. This is consistent with the Specification, which references these two elements on page 131, lines 9-11: "For non-smart batteries, an A/D converter 581 (FIG. 15) — with a controller 569 actuating a switch 585 to temporarily introduce a line load 587 in order to establish a rough V_{min} — will yield reasonably accurate values." This proposed amendment adds no new matter, being completely within the scope of the material set out in the documents.

16) In FIG. 17A, applicant proposes that the reference lines for elements 720B and 714B be lengthened slightly as shown in red, to more accurately point to the female connector assemblies. This proposed amendment corrects a minor oversight, and adds no new matter, being completely within the scope of the material set out in the documents.

17) In FIGs. 17B and C, applicant proposes that reference lines and numbers be incorporated for elements 762A and 764B, 762B and 764B, respectively. This proposed amendment is to facilitate identifying these connector blocks, as well as to be consistent with the reference numbers of FIG. 17A, the subject matter of which these drawings present more detailed views. These proposed new reference numbers have been temporarily incorporated into the Specification, pending the Examiner's approval of this proposed amendment. The Specification already had existing text relating to these elements on pages 140-142. This proposed amendment adds no new matter, being completely within the scope of the material set out in the documents.

18) In FIGs. 18A and B, the incorporation of a "Processor/Controller" 881 and an "A/D" Converter element 879 is proposed at the Third Device 877. This is consistent with the Specification, which recites these two elements on page 147, lines 18-20 as "An A/D converter 879 and processor/controller 881 allows third device 803 to detect power along its conductors 829 and 837, so that controller 881 can shut down power supply 805." This proposed amendment adds no new matter, being completely within the scope of the material set out in the documents.

19) In FIGs. 19A, B, and C, it is proposed that the "External Power" device 961, and related elements 959 and 957, be relocated from their previous position below Host Device 951, to the position indicated. The expansion of the Host Device box to reflect a Battery Bay 998 resulted in insufficient room on the drawing to leave these elements in their original locations. This proposed amendment adds no new matter, being completely within the scope of the material set out in the documents.

20) In FIGs. 19B, C, and D, applicant proposes the inclusion of a reference line and the reference number 911 to more fully identify the "Power Supply." This is consistent with related FIG. 19A, and is supported by the Specification on page 150, lines 4-6: "Connector apparatus 901A in FIG. 19A is used in a first step by having a third device 903 determine the operational mode of a battery source 947, and its associated host device 951, so that power supply 911 can deliver a correct voltage to host 951." This proposed amendment corrects a minor oversight, and adds no new matter, being completely within the scope of the material set out in the documents.

21) In FIG. 19D, applicant proposes correcting a minor oversight of mislabeling elements "966 Host" and "968 Battery." The battery sub-system being indicated is obviously to the left side of third device 903A, and the host sub-system is to the right side. This proposed amendment corrects a minor clerical error, and adds no new matter, being completely within the scope of the material set out in the documents.

22) In FIG. 19D, applicant proposes re-labeling previously labeled "Battery Source" 947 to

now read "Smart Battery Source." In that Host Device 951 includes a Smart Comm[unications] Circuit 962, it is obvious that the battery for powering such a smart host would be a smart battery source. The Specification recites (page 157, lines 13-15) that: "Sophisticated "smart" power systems typically require a well defined handshake between a smart battery and its host device, so such a mimicking strategy is not unrealistic in order to have a host 951 accept a third device 903 and communicate with it." Further, on page 150, line 21, through page 151, lines 1-3: "A branch of power conductors 927 and 937, as conductors 920 and 922, leads to A/D converter 918, where processor 907 acquires the battery 947's voltage. Being a "smart" battery 947, data on battery voltage, charge state and other conditions of the battery are available digitally along data conductors sets 985/965/931, 987/967/933, and 989/969/935." This proposed amendment corrects a minor oversight, and adds no new matter, being completely within the scope of the material set out in the documents.

23) In FIG. 19D, applicant proposes changing the reference number for the "Third Device" from the previous 903, to now 903A. This proposed amendment results in a drawing that more accurately reflects the significant differences between this modality of the Third Device from those depicted in related FIGs. 19A, B, and C. The proposed new reference number has been temporarily incorporated into the Specification, pending the Examiner's approval of this proposed amendment. This proposed amendment corrects a minor oversight, and adds no new matter, being completely within the scope of the material set out in the documents.

Applicant has included a full set of drawings (FIGs. 1-19D) as marked up in red with the clean version of the amended Specification, so that the Figures and text properly correspond. Note: applicant has renumbered all of the sheets 1/32 to 32/32. These changed are not marked in red since the sheet numbering is not referenced in the Specification.

IN THE CLAIMS